On August 25, 2003, USF&WS and DOE met in Salt Lake City to further discuss applicable risk-based criteria and standards that would be protective of endangered fish. On November 3, 2003, the draft BA was forwarded to USF&WS for comment. DOE received initial comments on the BA in early December 2003. Following receipt of the comments, a meeting was held on December 15, 2003. Additional comments were received in early January 2004, followed by telephone conferences to clarify issues and concerns.

On April 14, 2004, DOE submitted the final draft BA to USF&WS. In June through August 2004, DOE and USF&WS consulted extensively to resolve final comments on this document.

On August 10, 2004, DOE received formal comments on the final draft BA.

On May 26, 2005, based on the identification of off-site disposal at Crescent Junction using mostly rail and active ground water remediation as DOE's preferred alternatives, USF&WS submitted the final BO, which is included as Appendix A3.

A1−4.0 Description of the Proposed Action

DOE is proposing to remediate contaminated soils and materials and contaminated ground water at the Moab site. Three disposal alternatives are presented in the EIS:

- On-site disposal of tailings
- Off-site disposal of tailings (three locations, three transportation options considered)
- No action

On-site disposal of tailings is discussed in Section A1−4.1. Off-site disposal of tailings is discussed in Section A1−4.2. Active ground water remediation is proposed for both the on-site and off-site alternatives (Section A1−4.3.1). This BA places emphasis on ground water remediation due to contamination entering the Colorado River, which is designated critical habitat for four endangered fish species. The remediation goals (Section A1−4.3.2) are to reduce concentrations of five contaminants reaching the Colorado River to acceptable risk levels within 10 years of the ROD. Emphasis is placed on remediation of ammonia, which is the primary contaminant of concern. DOE implemented initial and interim actions (Section A1−4.3.3) in 2003 and 2004 in an attempt to begin reducing ammonia concentrations prior to full implementation of proposed ground water remediation.

DOE also analyzes the No Action alternative (Section 2.4 of the EIS), which serves as a baseline for comparing all alternatives, as required by NEPA regulation.

Although this BA assesses all of the alternatives included in the EIS to support final decision-making for remediation of the Moab mill tailings, the BO (Appendix A3) is limited in its scope to DOE's preferred alternatives of off-site disposal at Crescent Junction using mostly rail and active ground water remediation.

A1−4.1 On-Site (Moab) Remedial Actions

Under the on-site disposal alternative (Section A1−2.1 of the EIS), the existing tailings pile would be converted into a permanent, engineered, disposal cell into which all on-site and vicinity property contaminated material would be encapsulated. Upon completion of excavation and placement of all contaminated material, the disposal cell would be stabilized, recontoured, and covered (Figure A1−2). With the exception of specific engineering design changes, this alternative is similar to that proposed by the Atlas Corporation and described in Section A1−2.1 of NRC's 1999 EIS (NRC 1999). No on-site contaminated materials would be transported off the site. However, contaminated materials at vicinity properties would be transported to the Moab site on public roads.

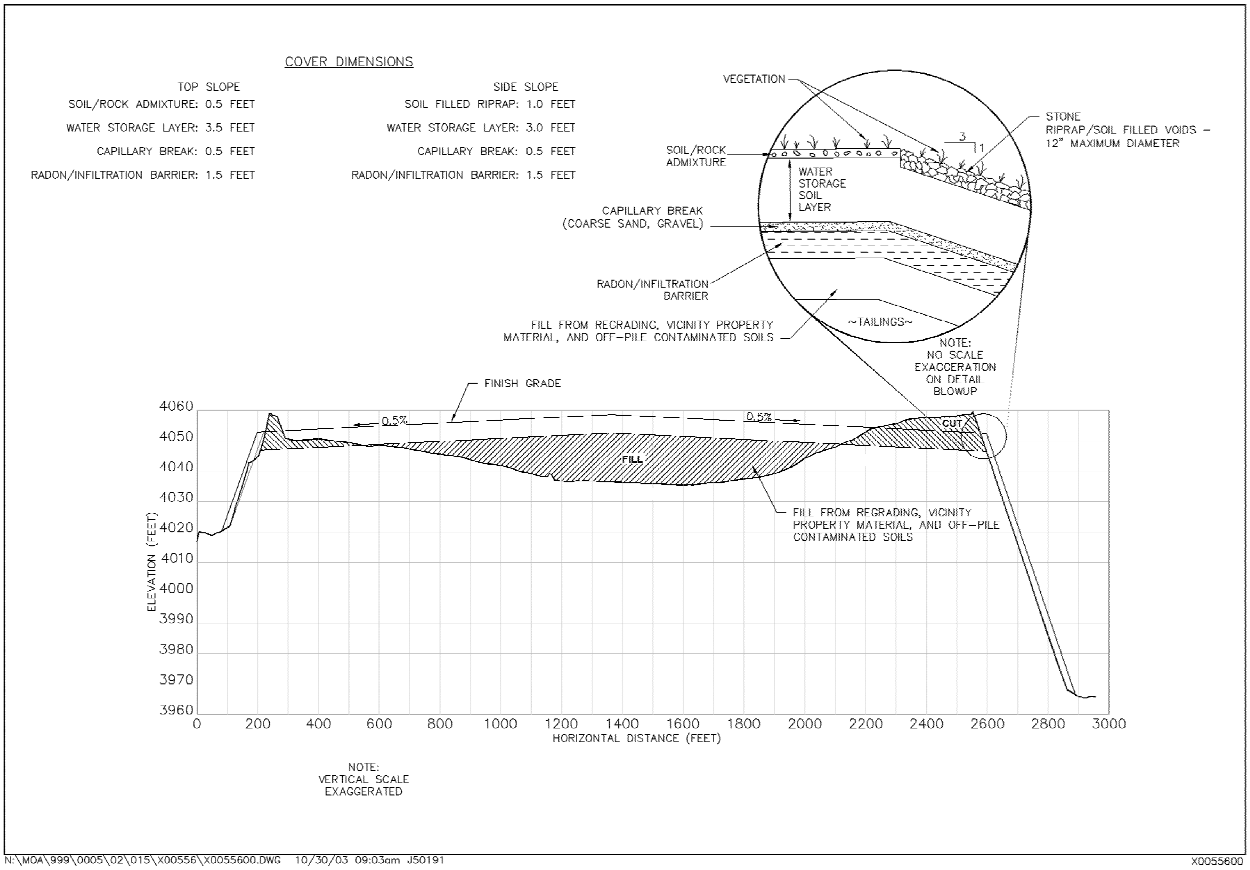

Figure A1−2. Typical Cross Section of Disposal Cell, On-Site Disposal Alternative

Activities would include grading and removing vegetation over almost the entire 439-acre site, both to prepare the site for subsequent activities and to remove surface contamination. These activities would remove remaining wildlife habitat (approximately 50 acres, primarily tamarisk) from the Moab site. Other site activities would include removing any existing structures and creating temporary construction support facilities (such as laydown yards, material stockpiles, vehicle maintenance and refueling areas, and vehicle decontamination facilities).

In the past, tailings material was removed from the Moab site and taken to off-site locations for a variety of purposes, such as backfill. In many cases, ore was stockpiled at various locations in the Moab area. For the purposes of analysis in the EIS, and based on available information and past experience, it has been estimated that about 98 locations, known as vicinity properties, may require remediation. All are relatively small (about 2,500 square feet [ft^2] and 300 cubic yards [yd^3]of material per site). These sites would be excavated and the materials transported by truck to the Moab site, where they would be stockpiled for eventual disposal at the selected disposal site.

If the on-site disposal alternative were selected, the route of Moab Wash (currently adjacent to the north and east sides of the tailings pile) would be altered to minimize potential damage to the tailings pile that could occur in the event of flooding. An engineered cover (Figure A1−2) consisting of a clay radon barrier, riprap, gravels, sands, and fine-grained soils would be constructed using materials obtained from several borrow areas (Figure A1−3, Table A1−2). Borrow materials would be transported to the Moab site by truck. Some improvements to existing roads may be required for access to some of the proposed borrow areas. Normal construction best management practices would be followed to limit wind and water erosion at the Moab site and borrow areas.

Table A1−2. Estimated Area of Disturbed Land at Borrow Areas for the Remediation Activities at the Moab Site, Moab, Utah

Borrow Material / Area	Estimated Area of Disturbance (Excavated acres or quarried volumes)	Estimated Available Area/Volume
Cover and Reclamation Soils		
Floy Wash	178–380 acres	1,035 acres
Crescent Junction	70–100 acres	4,925 acres
Tenmile	115–250 acres	1,480 acres
Courthouse Syncline	70–155 acres	4,925 acres
Blue Hills Road	70–185 acres	900 acres
Radon Barrier		
Klondike Flats	100–170 acres	10,000 acres
Crescent Junction	70–100 acres	4,925 acres
Sand and Gravel		
LeGrand Johnson	43,000–140,000 yd^3	13,000,000 yd^3
Riprap		
Papoose Quarry	185,000–257,000 yd^3	3,500,000 yd^3
Blanding	8–10 acres[a]	1,355 acres
Soils and Clay		
White Mesa Mill site	63–83 acres	300,000–400,000 yd^3

[a]Assumes rock layer thickness of 12 ft at the borrow area.

Upon completion of remediation activities at the Moab site (under either the on-site or off-site disposal alternatives), the site would be graded and prepared for replanting, including any seedbed preparation activities. Replanting with native species would take place as early as practicable following completion of these activities, ideally at the onset of the next growing season. Areas of the Moab site currently dominated by tamarisk would be replanted with native riparian species that are of equal or higher functional value for wildlife, particularly for the southwestern willow flycatcher. Methods would be employed to maximize the competitive advantage of the replacement vegetation against encroachment of non-native species. DOE would use such means to ensure the establishment of the native vegetation but would not be required to maintain it in perpetuity.

A1−4.2 Off-Site Remedial Actions

Under the off-site disposal alternative (Section A1−2.2 of the EIS), the tailings pile, contaminated on-site soils and materials that are not yet in the existing pile, and contaminated materials from the vicinity properties would be transported to one of three proposed off-site disposal alternative locations: Klondike Flats, Crescent Junction, or White Mesa Mill (see Figure A1−3). Contaminated materials would be transported using one of three possible modes of transportation: truck, rail, or slurry pipeline; however, rail transportation is not an option for transportation to the White Mesa Mill site.

In addition to the activities at the Moab site described in Section A1–4.1, if the off-site disposal alternative were selected, approximately 346 to 489 acres of land would be disturbed at the selected disposal site, depending on the site and transportation option selected. Additional activities at the off-site disposal site would include preparing the disposal cell and constructing support facilities such as laydown areas, stockpile areas, vehicle maintenance and refueling facilities, temporary offices, and material-handling facilities. Depending on the transportation option selected, some infrastructure improvements would be performed. An engineered barrier cap would be constructed over the tailings using materials obtained from borrow areas that would most likely be located near the selected disposal site. Table A1−2 shows areas of disturbance at borrow areas. The degree of disturbance would depend upon the borrow areas actually used.

If the off-site disposal alternative were selected, the tailings and vicinity property materials would be prepared for transport to the selected disposal site. Truck transport would require minor construction to allow for more efficient entrance onto and exit from US-191 at the Moab site and at the alternative disposal sites. Rail transport would require construction of a loading facility at the Moab site and some additional track and unloading facilities at the selected disposal site.

If a slurry pipeline were chosen as the means to transport materials, the pipeline would primarily be aligned close to existing roads (primarily US-191) or existing natural gas or utility rights-of-way, although some new rights-of-way would be required.

A1−4.3 Moab Site Ground Water Remedial Actions

A1−4.3.1 Proposed Action

DOE’s proposed action for ground water remediation at the Moab site is to design and implement an active remediation system and also apply ground water supplemental standards. These actions would be in addition to the initial and interim actions (described in Section A1−4.3.3) that have already been implemented. Ground water remediation would be implemented under both the on-site and off-site tailings disposal alternatives. The remediation system would be designed to intercept contaminated ground water that is currently discharging into the near-bank, shoreline area of the Colorado River, which is designated critical habitat for endangered fish species. It is estimated that up to 5 years may be required to design and construct the remediation system. Once the system is implemented, up to 5 years of operation may be required before the action becomes completely effective and provides the requisite protection in the adjacent surface waters (Figure A1−4). However, these time frames are conservative, and the time needed to design, implement, and achieve protective levels may be substantially less. In addition, the proposed action would, at a minimum, meet the protective surface water criteria. It is possible that effects of the interim action and the proposed action may achieve background surface water quality conditions in less than the estimated 10 years after the ROD. This is discussed in more detail in Section A1–4.3.3. The system would be operated until ground water contaminant concentrations decreased to a level that would no longer present a risk to aquatic species. This is predicted to be 75 years for the off-site disposal alternative, and 80 years for the on-site disposal alternative (Figure A1−4). More detailed information is presented in Section 2.3 of the EIS.

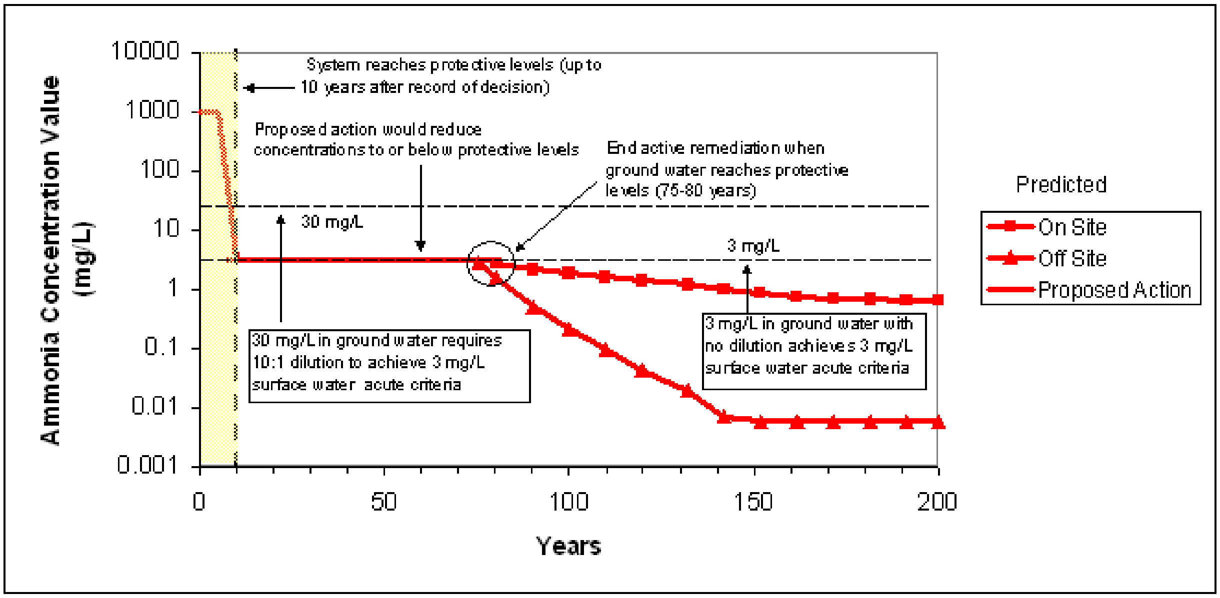

Figure A1−4. Predicted Maximum Ammonia Concentrations in Ground Water for Active Remediation

Supplemental standards (40 CFR 192), would also be applied to ground water at the site. Ground water beneath the site qualifies for supplemental standards because it meets the criteria for limited use ground water. Section 2.3 of the EIS discusses ground water standards in more detail. These standards apply to human health and would not affect the active remediation goals discussed in the preceding sections.

A1−4.3.2 Remediation Goals for Contaminants of Concern

Aquatic Goals

Remediation goals are based on the contaminants of concern identified in Appendix A2 of the EIS, as summarized in Section A1−7.2 of this BA. Appendix A2 of the EIS, *Screening of Contaminants to Aquatic and Terrestrial Resources*, identified ammonia, copper, manganese, sulfate, and uranium as the chemical contaminants of concern. The primary contaminant of concern that would require ground water remediation is ammonia. The area of contamination varies with hydrologic regime but in general is confined to an area less than 53,800 ft^2 (approximately 1.25 acres) (USGS 2002).

Remediation goals for ammonia include the acute and chronic benchmarks based on ambient pH and temperature conditions in compliance with the National Recommended Water Quality Criteria (NWQC) (EPA 2002) and currently proposed Utah Water Quality Standards (UAC 2003, UDEQ 2003). The approach for setting the goals is discussed in Section 2.3 of the EIS. It is DOE's position that achieving a target goal of approximately 3 milligrams per liter (mg/L) for ammonia in ground water would result in compliance with the range of surface water standards in the Colorado River. The 3-mg/L target goal represents the low end of the reasonable range of acute standards. The 3-mg/L concentration represents a 2- to 3-order-of-magnitude decrease in the center of the ammonia plume and would be expected to result in a corresponding decrease in surface water. In addition, based on analysis of collocated samples of interstitial ground water (pore water) and surface water, additional dilution occurs as the ammonia moves from the bank of the river into the water column. The dilution is estimated to be an average of 10-fold (DOE 2003a). The combination of active remediation, dilution into surface water, and the tendency for ammonia to volatilize should result in compliance with both acute and chronic ammonia standards in the river everywhere adjacent to the site. It is anticipated that ground water remediation would decrease and maintain the concentrations all of contaminants of concern at levels protective of aquatic species.

Terrestrial Goals

Contaminants of concern are identified in Appendix A2 of the EIS, and the potential effects of these contaminants are summarized in Section A1−8.2 of this BA. Appendix A2 of the EIS, *Screening of Contaminants to Aquatic and Terrestrial Resources,* identified mercury and selenium as contaminants of concern.

Remediation goals for terrestrial or avian species have not been established. This is due to limited potential for threatened or endangered receptors (both plant and animal) to be adversely affected by contaminated surface water or ground water, which is discussed in detail in Section A1−8.2 of this BA. Limited potential is based the risk analysis in Appendix A2 of the EIS and includes potential exposure pathways, potential presence of species, and potential use of ground water or surface water. Although specific goals are not established, concentrations of contaminants of concern would be reduced by proposed ground water remediation, which would reduce concentrations in surface water.

As a result of remediation, contaminants may concentrate in an evaporation pond. If concentrations presented a risk to threatened or endangered species, mitigation may be required as discussed in Section A1–8.1 of this BA.

A1−4.3.3 Initial and Interim Actions Related to the Proposed Action

As stated in Section A1−3.0, DOE, upon accepting responsibility for the site, initiated consultations with USF&WS. Based on these consultations, and after reviewing historical surface water quality studies and data, DOE and USF&WS both agreed that an immediate risk was posed to endangered fish and designated critical habitat. The source of the risk was identified as elevated concentrations of site-related ground water contaminants (primarily ammonia) reaching the Colorado River.

On April 30, 2002, USF&WS concurred with DOE's determination to implement an initial action, followed by an interim action. The goal of the initial action was to dilute ammonia concentrations at the ground water–surface water interface in areas that presented the greatest potential for fish to be present, when backwater habitat has developed. It was estimated that backwater habitat would most likely be present from June through August at flows of 5,000 to 15,000 cubic feet per second (cfs). The action focused on the segment of the Colorado River from Moab Wash extending approximately 800 feet (ft) downriver; that segment contributes the highest concentrations of contaminants to the river. The initial action was designed to take fresh water upstream of the site and pump it through a distribution system to backwater areas. The system was not installed in 2003 due to low flows. The system was installed and tested in 2004 but not fully implemented because the targeted backwater areas never held water. This was due to low river flows caused by drought.

The goal of the interim action is to extract contaminated ground water near the Colorado River, thereby reducing the amount of contamination reaching the river. DOE funded, designed, and implemented the system (Phase I) in 2003, which included 10 extraction wells aligned parallel to the Colorado River. The system is designed to withdraw ground water at the rate of approximately 30 gallons per minute (gpm) and pump it to an evaporation pond on top of the existing tailings pile. On April 4, 2004, USF&WS concurred with DOE's determination to construct a land-applied sprinkler system designed to increase evaporation rates. The system was installed in the existing evaporation pond area. In July 2004, DOE added another 10 extraction wells (Phase II) near the first 10 wells to increase the rates of ground water extraction and to test the effects of freshwater injection on surface water concentrations. If the interim actions are successful, a reduction in contaminant concentrations in surface water could be observed significantly sooner than the 10-year time frame considered under the proposed action. DOE will monitor surface water quality and provide the reports to USF&WS annually at a minimum.

A1−4.3.4 Ground Water Remediation Options

For purposes of this BA, active ground water remediation would consist of one or a combination of the options described below. All proposed remediation options would occur within the footprint of historical millsite activities and areas requiring surface remediation. Figure A1−5 shows the area of proposed ground water remediation. Final selection of the most appropriate option(s) would be documented in a remedial action plan (RAP) and would depend upon which surface disposal alternative is selected.

- Ground water extraction, treatment, and disposal
- Ground water extraction and deep well injection (without treatment)
- In situ ground water treatment
- Clean water application

Section 2.3 of the EIS describes these remediation options in detail.

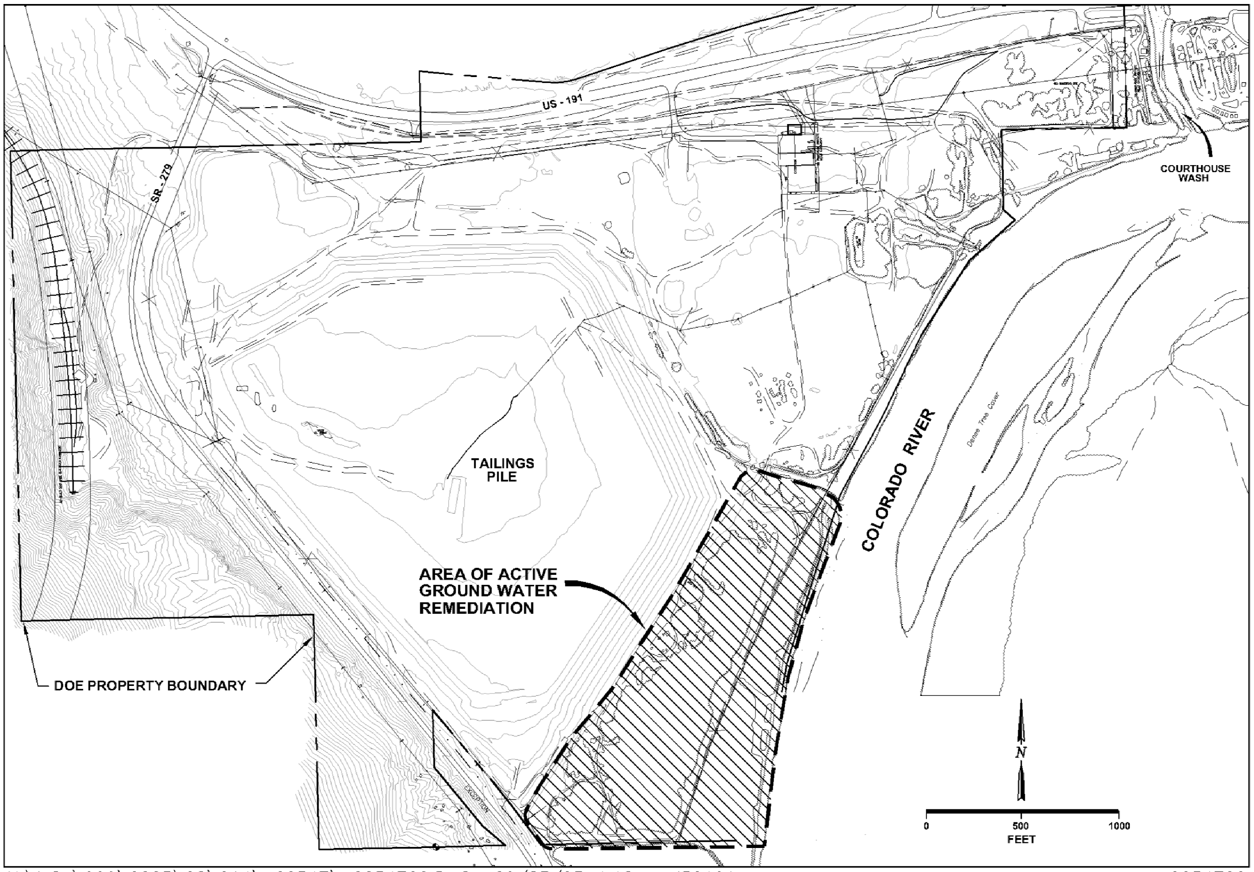

Figure A1−5. Area of Proposed Active Ground Water Remediation

Ground Water Extraction, Treatment, and Disposal

Ground Water Extraction: The two proposed methods for extracting contaminated ground water are extraction wells or interception trenches.

If extraction wells were used, between 50 and 150 wells would be installed to depths of up to 50 ft using conventional drilling equipment. This design would allow for extracting up to 150 gpm of contaminated ground water. The water would be pumped from the wells to a treatment collection point (e.g., evaporation pond) via subsurface piping. The system would be installed between the current tailings pile location and the Colorado River to intercept the plume before it discharged to the river and would require up to 50 acres of land for the duration of ground water remediation. The proposed locations are within the area of historical site disturbances and areas requiring remediation of contaminated soils. It is expected that the system would be installed after any remediation of surface soils required in these areas. It is possible that some extraction wells would need to be installed adjacent to the river in areas northeast of the tailings pile in the vicinity of the old millsite.

If shallow trenches were used, they would be constructed to intercept shallow ground water, which would be piped via shallow subsurface piping to a collection point for treatment (e.g., evaporation pond). This design would allow for extracting up to 150 gpm of contaminated ground water. It is estimated that the system would require from 1,500 to 2,000 lineal ft of trenches and could affect up to 50 acres of land for the duration of ground water remediation. The proposed locations are within the area of historical site disturbances and areas requiring remediation of contaminated soils.

Treatment Options: DOE has screened potential treatment technologies, which would be applicable for treatment of ammonia and other contaminants of concern (DOE 2003a). The treatment options and technologies described below are meant to bound the range of viable possibilities. All treatment options would require construction of infrastructure. The level of treatment would depend largely on the selected method of effluent discharge. Therefore, specific treatment goals could not be established until the specific discharge method(s) were selected. The treatment goals would have to consider risk analysis and regulatory requirements.

Additional testing, characterization, or pilot studies may be required before the optimum system could be selected and designed. This level of design would be developed in a RAP following publication of the ROD. The Site Observational Work Plan (SOWP) (DOE 2003a) presents more detailed descriptions and discussion of the screening process for the following treatment options.

- Standard evaporation
- Enhanced evaporation
- Distillation
- Ammonia stripping
- Ammonia recovery
- Chemical oxidation
- Zero-valent iron
- Ion exchange
- Membrane separation
- Sulfate coagulation

Because evaporation is a primary treatment consideration and is also considered a disposal option, it is included in more detail in this BA. Evaporation treats extracted ground water by allowing the water to evaporate due to the dry conditions of the site and warm temperatures during part of the year. Influent rates to the ponds would match the rate of natural evaporation. Nonvolatile contaminants would be contained and allowed to concentrate, which would require provisions for disposal of the accumulated solids. Evaporation could also be used to treat concentrated wastewater from treatment processes such as distillation and ion-exchange that produce a wastewater stream. Passive evaporation would not require any mixing after disposal in the ponds. If it were determined that concentrations would present a risk to avian or terrestrial species, a wildlife management plan would be submitted to the USF&WS.

Solar evaporation would consist of putting the water into large, double-lined outdoor ponds built in the floodplain to withstand 100-year precipitation and flood events. In the absence of enhanced methods, a sufficiently large pond or ponds would need to be constructed in order to achieve evaporation rates that could keep up with extraction rates and complete remediation in a reasonable time frame. Estimated pond areas could range up to 40 acres, and a total of 60 acres of land would need to be disturbed. This would also require some type of small support facility. Devices such as spray nozzles could considerably enhance evaporation rates.

Disposal Options: If ground water were treated by a method other than evaporation, the treated water would require disposal by one of the following methods:

- Discharge to surface water
- Shallow injection
- Deep well injection

The Colorado River is a boundary to the Moab site, and it would be the natural repository of the site ground water if effluent were discharged to surface water. Based on water quality standards and designation as critical habitat for endangered fish, it is likely that this option would require extensive water treatment for all contaminants of concern. If discharge to the river was considered a viable alternative for dealing with treatment effluent, appropriate permits would need to be obtained from the state, and compliance with conditions such as discharge rates and effluent composition would be required.

If shallow injection were selected, injection wells would be used to return the treated ground water directly back into the alluvial aquifer. Treated ground water could potentially be used to recharge the aquifer at different points to allow manipulation of hydraulic gradients. This could facilitate extraction of the lower quality water and faster removal of the contaminant source. This option would require treatment of ammonia.

If deep well injection were selected, treated ground water would be disposed of by deep well injection into the Paradox Formation or deep brine aquifer. Ground water hydrology beneath the site includes a deep salt formation called the Paradox Formation overlain by a deep aquifer with a high salt concentration (brine water). This method would likely require an underground injection control permit from the State of Utah.

Ground Water Extraction and Deep Well Injection (without treatment)

If this option were selected, ground water would be extracted using a system and infrastructure similar to that described above, and untreated water would be pumped into a geologically isolated zone. This option would likely require an underground injection control permit from the State of Utah and concurrence from NRC.

In Situ Remediation

If this option were selected, it would include some form of biodegradation, including but not limited to phytoremediation. This option would require minimal infrastructure and could require state or federal permits, depending on the method of biodegradation.

Clean Water Application

Another aspect of the active remediation system could involve some form of application of clean water to dilute ammonia concentrations in the backwater areas along the Colorado River where potentially suitable habitat for endangered fish may exist. This would likely take either or both of two possible configurations. The first configuration would consist of diverting uncontaminated water from the Colorado River through a screened intake at the nearest location just upstream of

Moab Wash. A water delivery system consisting of a pump and aboveground piping would redistribute the water to the backwater areas along a section of the sandbar of up to 1,200 ft beginning just south of Moab Wash. Flow meters and valves would be used to measure and control the rate of upstream river water released at each distribution point to minimize turbidity and velocities. The components and operation would be similar to the 1,360-gpm system originally planned as an initial action for the sandbar area adjacent to the site (DOE 2002a) or some alternative system design.

A variation of the clean water application could consist of using injection wells or an infiltration trench to deliver uncontaminated river water indirectly to the backwater areas. For this second configuration, clean water would be collected from the Colorado River and pumped to the site water storage ponds to control suspended sediment and prevent system clogging. The storage pond water would then be introduced to the shallow ground water system by a series of injection wells or infiltration trenches located along the bank adjacent to the backwater areas. The clean water would enter the backwater areas by bank discharge of ground water to provide dilution of ammonia concentrations. This clean water application system could also be combined with the extraction wells discussed earlier to control drawdown and minimize the potential for brine upconing. For this case, up to 150 gpm of uncontaminated river water would be needed to balance the amount of plume water extracted.

A1−4.3.5 Implementation and Operation

DOE estimates that design, procurement, testing, construction, and implementation of an active ground water remediation system would be complete within 5 years of issuance of the ROD. Design criteria and specifications would depend upon whether the on-site or off-site alternative is selected for tailings disposal.

After the system begins operation, DOE estimates that as much as an additional 5 years would be required to reduce concentrations of contaminants in the surface water to levels that are protective of aquatic species in the Colorado River, if protective levels were not already achieved as a result of interim actions. However, it is possible that considerably less time may be required to reach protective levels. The active remediation system would extract and treat ground water for 75 to 80 years (depending on whether the off-site or on-site surface remediation alternative were implemented) to maintain surface water quality goals. Contaminant concentrations in ground water would thus be reduced to acceptable risk levels prior to entry into the Colorado River. Active remediation would cease only after ground water and surface water monitoring confirmed that long-term remediation goals were achieved and after appropriate consultation and concurrence with USF&WS. The uncertainties and assumptions associated with the success of active remediation are discussed below.

DOE would monitor the progress of remedial actions to determine if goals are being met and would commit to ongoing consultation with USF&WS. In addition, DOE would provide monitoring data and remediation results annually to USF&WS.

Uncertainties

DOE does not have a quantitative estimate of uncertainty associated with the ground water modeling predictions estimating the time for ground water concentrations to reach levels protective of aquatic species. Sections 7.3.5.5, 7.6, and 7.8.3 of the SOWP (DOE 2003a) discuss the sensitivity of the ground water flow and transport model to specific modeling input parameters as well as modeling uncertainty. Specifically, transport parameters (e.g., tailings seepage concentration and the natural degradation of ammonia in the subsurface) were found to have a much greater impact on predicted concentrations than did flow parameters (e.g., hydraulic conductivity and effective porosity). The sensitivity analysis performed indicates that perturbing the key transport parameters from the calibrated values could result in either significantly higher or significantly lower contaminant concentrations in the ground water adjacent to the river: it did not indicate the probability or likelihood of any one outcome.

Many variables affect prediction accuracy, and the system of contaminant transport and the interaction between ground water and surface are complex, largely due to the dynamic nature of river stage and backwater area morphology. To compensate for the inherent uncertainties, DOE has assumed a conservative protective water quality goal of meeting the lowest possible acute aquatic standard (based on the range of observed pH and temperature conditions in the river) in the ground water with no consideration of dilution. Model predictions, supported by site-specific data, also indicate that long-term ground water concentrations adjacent to the river (background for the off-site disposal alternative and 0.7 mg/L ammonia for the on-site disposal alternative) would be protective for chronic exposure scenarios for all but the worst-case pH and temperature conditions without any consideration of dilution from the surface water.

On the basis of site-specific data and a study of site conditions, DOE has a reasonable degree of confidence that protective conditions would be met and maintained during both the operation of the corrective action and following achievement of water quality goals. To ensure that protective conditions were met, DOE would monitor the ground water and surface water systems and would hold regular consultations with USF&WS. In addition, the active remediation system would continue throughout the 75- to 80-year remedial action period and into the post-remedial action confirmation monitoring period.

A1−5.0 Description of Project Areas

Preliminary consultations and investigations indicate that listed threatened or endangered terrestrial wildlife species are not known to occur, nor are they strongly expected to occur, at the Moab, Klondike Flats, Crescent Junction, or White Mesa Mill sites. The proposed pipeline corridor to the White Mesa Mill site provides the greatest potential for terrestrial threatened or endangered species to be present. However, before developing any disposal site, DOE, in consultation with USF&WS, would determine the need for additional habitat evaluations and surveys for species that could be affected. If threatened or endangered species or critical habitats were identified at a selected site, a mitigation plan would be developed to minimize potential adverse impacts. If impacts could not be avoided, additional Section 7 consultation would be required.